

APPENDIX A**Initial Regulatory Flexibility Analysis**

As required by Section 603 of the Regulatory Flexibility Act,¹¹⁸ the Commission has prepared an Initial Regulatory Flexibility Analysis (IRFA) of the expected impact on small and very small entities of the policies and rules proposed in this Notice of Proposed Rule Making (Notice). Written public comments are requested on the IRFA. Comments must be identified as responses to the IRFA and must be filed by the deadlines for comments on the Notice.

Reason for Action

This rulemaking is being initiated to adopt certain licensing and service rules for the 24 GHz band, to auction 24 GHz spectrum not used by Digital Electronic Message Service (DEMS) licensees relocated from the 18.82-18.92 and 19.16-19.26 GHz bands (18 GHz band) to the 24.25-24.45 and 25.05-25.25 GHz bands (24 GHz band).

Objectives

Our objectives are: (1) to accommodate the introduction of new uses of spectrum and the enhancement of existing uses; and (2) to facilitate the awarding of licenses to entities who value them the most.

Legal Basis for Proposed Rules

The proposed action is authorized under the Administrative Procedure Act, 5 U.S.C. § 553; and sections 1, 4(i), 7, 301, 303, 308 and 309(j) of the Communications Act of 1934, as amended, 47 U.S.C. §§ 151, 154(i), 157, 301, 303, 308 and 309(j).

Description and Estimate of Small Entities Subject to the Rules

The rules will affect incumbent licensees who are relocated to the 24 GHz band from the 18 GHz band and applicants who wish to provide services in the 24 GHz band.

The Commission has not developed a definition of small entities applicable to licensees in the 24 GHz band. Therefore, the applicable definition of small entity is the definition under the Small Business Administration (SBA) rules for the radiotelephone industry that provides that a small entity is a radiotelephone company employing fewer than 1,500 persons.¹¹⁹ The 1992 Census of Transportation, Communications, and Utilities, conducted by the Bureau of the Census, which is the most recent

¹¹⁸ See 5 U.S.C. § 603.

¹¹⁹ See 13 C.F.R. § 121.201, Standard Industrial Classification (SIC) Code 4812.

information available, shows that only 12 radiotelephone firms out of a total of 1,178 such firms that operated during 1992 had 1,000 or more employees.¹²⁰ We believe that there are only two licensees in the 24 GHz band that will be relocated, Teligent and TRW, Inc. It is our understanding that Teligent and its related companies have less than 1500 employees, although this may change in the future. On the other hand, TRW is not a small entity. We therefore believe that only one licensee in the 24 GHz is a small business entity.¹²¹ We seek comment on this analysis. In providing such comment, commenters are requested to provide information regarding how many total and small business entities would be relocated.

The proposals also affect potential new licensees on the 24 GHz band. Pursuant to 47 C.F.R. § 24.720(b), the Commission has defined "small entity" for Blocks C and F broadband PCS licensees as firms that had average gross revenues of less than \$40 million in the three previous calendar years. This regulation defining "small entity" in the context of broadband PCS auctions has been approved by the SBA.¹²² With respect to new applicants in the 24 GHz band, we also propose to use the small entity definition adopted in the Broadband PCS proceeding. With regard to "very small businesses" we propose to adopt the definition used for 39 GHz licenses and for the PCS C and F block licenses: businesses with average annual gross revenues for the three preceding years not in excess of \$15 million.

The Commission will not know how many licensees will be small or very small businesses until the auction, if required, is held. Even after that, the Commission will not know how many licensees will partition their license areas or disaggregate their spectrum blocks, if partitioning and disaggregation are allowed. In view of our lack of knowledge of the entities that will seek 24 GHz licenses, we therefore assume that, for purposes of our evaluations and conclusions in the Initial Regulatory Flexibility Analysis, all of the prospective licensees are either small or very small business entities.

We invite comment on this analysis.

Reporting, Recordkeeping, and Other Compliance Requirements

Applicants for 24 GHz licenses will be required to submit applications. We request comment on how these requirements can be modified to reduce the burden on small entities and still meet the objectives of the proceeding.

Significant Alternatives Minimizing the Impact on Small Entities Consistent with Stated

¹²⁰ U.S. Bureau of the Census, U.S. Department of Commerce, 1992 Census of Transportation, Communications, and Utilities, UC92-S-1, Subject Series, Establishment and Firm Size, Table 5, Employment Size of Firms: 1992, SIC Code 4812 (issued May 1995).

¹²¹ Teligent has acquired the DEMS licenses of FirstMark, the only other licensee in the 24 GHz band whose license has been modified to require relocation to the 24 GHz band.

¹²² See Implementation of Section 309(j) of the Communications Act — Competitive Bidding, *Fifth Report and Order*, 9 FCC Rcd 5532, 5581-82, ¶ 115 (1994).

Objectives

We have reduced burdens wherever possible. To minimize any negative impact, however, we propose certain incentives for small and very small entities that will redound to their benefit. These special provisions include partitioning and spectrum disaggregation. The regulatory burdens we have retained, such as filing applications on appropriate forms, are necessary in order to ensure that the public receives the benefits of innovative new services in a prompt and efficient manner. We will continue to examine alternatives in the future with the objectives of eliminating unnecessary regulations and minimizing any significant economic impact on small entities. We seek comment on significant alternatives commenters believe we should adopt.

Federal Rules That Overlap, Duplicate, or Conflict with These Proposed Rules

None.

Appendix B**Proposed Rules**

Parts 1, 2, and 101 of Title 47 of the Code of Federal Regulations are amended as follows:

PART 1 -- PRACTICE AND PROCEDURE

1. The authority citation for Part 1 continues to read as follows:

AUTHORITY: 47 U.S.C. sections 151, 154, 303, and 309(j) unless otherwise noted.

2. The entries on the Table in Section 1.1307(b)(1) for Wireless Communications Service are proposed to be amended to read as follows:

§ 1.1307 **Actions which may have a significant environmental effect, for which Environmental Assessments (EAs) must be prepared.**

* * * * *

(b) * * *

(1) ***

TABLE 1: TRANSMITTERS, FACILITIES AND OPERATIONS SUBJECT TO ROUTINE ENVIRONMENTAL EVALUATION

| Service (Title 47 CFR Rule Part) | Evaluation Required if: |
|----------------------------------|--------------------------------------------------------|
| * | * |
| 24 GHz (subpart G of part 101) | Total power of all channels > 1000 W ERP (1640 W EIRP) |
| * | * |

* * * * *

PART 2 -- FREQUENCY ALLOCATIONS AND RADIO TREATY MATTERS; GENERAL RULES AND REGULATIONS

3. The authority citation for Part 2 continues to read as follows:

AUTHORITY: Section 4, 302, 303, and 307 of the Communications Act of 1934, as amended, 47 U.S.C. Sections 154, 302, 303 and 307, unless otherwise noted.

4. Section 2.106, the Table of Frequency Allocations, is proposed to be amended as follows:

- a. Remove the existing entries for 24.25 - 24.45 GHz and 25.05 - 25.25 GHz.
- b. Add entries in numerical order for 24.25 - 24.45 GHz and 25.05 - 25.25 GHz.
- c. Delete Footnote US341.

The proposed revisions and additions read as follows:

§ 2.106 Table of Frequency Allocations

* * * * *

| International table | | | United States table | | FCC use designators | |
|-------------------------------|--------------------------------------------------------------------|---------------------------------------------------------------------------------------|-----------------------|--------------------------------------|-----------------------------|----------------------------|
| Region 1 -- allocation GHz | Region 2 -- allocation GHz | Region 3 -- allocation GHz | Government | Non-Government | Rule part(s) | Special-use frequencies |
| (1) | (2) | (3) | Allocation GHz (4) | Allocation GHz (5) | (6) | (7) |
| * | * | * | * | * | * | * |
| 24.25 – 24.45 FIXED | 24.25 – 24.45 RADIONAVIGAT ION | 24.25 – 24.45 RADIONAVIGAT ION FIXED MOBILE | 24.25 – 24.45 | 24.25 – 24.45 FIXED | FIXED MICROWAVE (101) | |
| * | * | * | * | * | * | * |
| 24.75 – 25.05 FIXED | 24.75 – 25.05 FIXED- SATELLITE (Earth-to-space) S5.535 | 24.75 – 25.05 FIXED FIXED- SATELLITE (Earth-to-space) S5.535 MOBILE | 24.75 – 25.05 | 24.75 – 25.05 RADIONAVIGAT ION | AVIATION (87) | |

| | | | | | | |
|------------------------|--------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|---------------|------------------------|-----------------------------|---|
| | | S5.534 | | | | |
| 25.05 – 25.25 FIXED | 25.05 – 25.25 FIXED- SATELLITE (Earth-to-space) S5.535 | 25.05 – 25.25 FIXED FIXED- SATELLITE (Earth-to-space) S5.535 MOBILE S5.534 | 25.05 – 25.25 | 25.05 – 25.25 FIXED | FIXED MICROWAVE (101) | |
| * | * | * | * | * | * | * |

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UNITED STATES FOOTNOTES

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Section 87

5. Section 87.173(b): delete radionavigation use from Table (Chart).

PART 101--FIXED MICROWAVE SERVICES

6. The authority citation for Part 101 continues to read as follows:

Authority: 47 U.S.C. §§ 154, 303, 309(j), unless otherwise noted.

7. Section 101.1 is proposed to be amended by inserting the words "24 GHz Service" between the words "carrier" and "and" in subsection 101.1(a).

8. Section 101.3 is proposed to be amended by replacing the definition of Digital Electronic Message Service to read as follows:

§ 101.3 Definitions

As used in this part:

* * * * *

24 GHz Service. A radiocommunication service that may encompass any digital fixed service.

* * * * *

9. Section 101.5(b) is reserved for future use. However, the text which currently appears in §101.5(b) is deleted.

10. Section 101.13 is proposed to be amended by deleting subsection 101.13(c) and redesignating subsections (d), (e) and (f) as (c), (d) and (e), respectively.

11. Section 101.15 is proposed to be amended by adding the words "and 24 GHz Service in subpart G of this part" after the words "Local Multipoint Distribution Service in subpart L of this part" in subsection 101.15(a).

12. Section 101.21 is proposed to be amended by:

(a) deleting the words "and Digital Electronic Message Services (excluding user stations)" and by adding the word "and" before "Local Television Transmission" in subsection 101.21(d).

(b) inserting the words "and 24 GHz Service" after the words "Local Multipoint Distribution

Service" in subsection 101.21 (g).

13. Section 101.29 is proposed to be amended by deleting subsection 101.29(c)(1)(ix).

14. Section 101.37 is proposed to be amended by revising subsections 101.37 (a)(1) and (a)(3) to read as follows:

§ 101.37 Public notice period.

(a) At regular intervals, the Commission will issue a public notice listing:

* * * * *

(1) The acceptance for filing of common carrier applications, Local Multipoint Distribution Service applications, 24GHz Service applications, and major amendments thereto;

* * * * *

(3) The receipt of common carrier applications, Local Multipoint Distribution Service applications, and 24 GHz Service applications for minor modifications made pursuant to § 101.59;

15. Section 101.45 is proposed to be amended by adding the words "and in the 24 GHz Service" after the words "Local Multipoint Distribution Service" in subsection 101.45(b).

16. Section 101.57 is proposed to be amended by inserting the words "or in the 24 GHz Service after the effective date of the Order" after the words "March 11, 1997" in subsection 101.57(a)(1)(ii).

17. Section 101.61 is proposed to be amended by revising subsection 101.61(b)(1) to read as follows:

§ 101.61 Certain modifications not requiring prior authorization.

(b) * * *

(1) Frequency coordination procedures, as necessary, are complied with in accordance with § 101.103(d).

18. Section 101.61 is proposed to be amended by inserting the words "and in the 24 GHz Service" after the words "Local Multipoint Distribution Service" in subsections 101.61(c)(9) and 101.61(d) and by inserting the words "upon notification of the Commission within 30 days of the change" after the words "an existing license" in subsection 101.61(c)(9).

19. Section 101.63 is proposed to be amended by inserting the words "and in the 24 GHz Service" after the words "Local Multipoint Distribution Service" in subsection 101.63(a).

20. Section 101.105 is proposed to be amended by deleting the words "and all point-to-multipoint channels in the 18 GHz band" after the words "in the 10.6 GHz band" in subsection 101.105(c)(6).

21. Section 101.111 is proposed to be amended by revising subsection 101.111(a)(4) to read as follows:

§ 101.111 Emission Limitations.

(1) * * *

(a) * * *

(4) For DEMS channels in the 17,700-19,700 and 24,250-25,250 MHz bands:

(i) On any frequency removed from the center frequency of the DEMS channel by more than 50 percent of that channel's bandwidth:

$A = 35 + 0.75(F - 0.5B)$ dB (in any 4 kHz channel), or

$A = 11 + 0.75(F - 0.5B)$ dB (in any 1 MHz channel),

but in no event greater than 80 decibels:

A = attenuation (in decibels) below mean output power level contained within the DEMS channel for a given polarization

B = bandwidth of DEMS channel (in MHz)

F = absolute value of the difference between the center frequency of the measured band and the center frequency of the DEMS channel

(ii) In any 4 kHz band, the center frequency which is outside the DEMS bands: At least $43 + 10 \log_{10}(\text{mean output power in watts})$ dB.

22. Section 101.147 is proposed to be amended by deleting the words "except that channels 35-39 are available only to existing 18 GHz licensees as of March 14, 1997" and by deleting subparagraphs (i) and (ii) in subsection 101.147(r)(9).

23. Section 101.305 is proposed to be amended by inserting a comma and deleting the word "and" after the words "Common Carrier Radio Services" and by inserting the words "and the 24 GHz Digital Electronic Message Service" after the words "Local Multipoint Distribution Services" in subsection 101.305(a).

24. Section 101.311 is proposed to be amended by inserting the words "and 24 GHz Service" after the words "Local Multipoint Distribution Service".

25. Section 101.501 is proposed to be amended to read as follows:

§ 101.501 Eligibility

"See § 101.147(n) for licensing of DEMS facilities in the 10.6 GHz band. Applications for new facilities using the 18 GHz band are no longer being accepted. Any entity, other than one precluded by § 101.7 or § 101.1003 of this part, is eligible for authorization to provide DEMS under this subpart."

26. Section 101.503 is proposed to be amended by adding the words "10.6 GHz" before the word "DEMS" wherever it appears.

27. Section 101.505 is proposed to be amended by replacing the words "§ 101.147(r)(9)" with "§§

101.147(m), (n), and (r)(9)."

28. Section 101.509 is proposed to be amended to read as follows:

§ 101.509 Interference Protection Criteria.

- (a) All harmful interference to other users and blocking of adjacent channel use in the same or adjacent geographical area is prohibited. In areas where EAs are in close proximity, careful consideration should be given to minimum power requirements and to the location, height, and radiation pattern of the transmitting antenna. Licensees are expected to cooperate fully in attempting to resolve problems of potential interference before bringing the matter to the attention of the Commission.
- (b) As a condition for use of frequencies in this service each licensee is required to:
 - (1) Engineer the system to be reasonably compatible with adjacent and co-channel operations in the same or adjacent areas; and
 - (2) Cooperate fully and in good faith to resolve whatever potential interference and transmission security problems may be present in adjacent and co-channel operations.
- (c) Licensee shall coordinate their facilities whenever the facilities have line-of-sight into other licensees' facilities or are within the same geographic area. Licensees are encouraged to develop operational agreements with relevant licensees in the same or adjacent areas.
- (d) Licensees shall comply with the appropriate coordination agreements between the United States and Canada and the United States and Mexico concerning cross-border sharing and use of the 24 GHz bands.

29. Section 101.511 is proposed to be amended to read as follows:

§ 101.511 Permissible services.

- (a) Authorizations for stations in the 24 GHz Service will be granted to provide services on a common carrier basis or a non-common carrier basis or on both a common carrier and non-common carrier basis in a single authorization.
- (b) Stations may render any kind of digital communications service consistent with the Commission's rules and the regulatory status of the station to provide services on a common carrier or non-common carrier basis.
- (c) An applicant or licensee may submit a petition at any time requesting clarification of the regulatory status required to provide a specific communications service.

30. Section 101.521 is proposed to be amended by adding the words "in the 10.6 GHz band" after the word "frequencies."

31. Section 101.523 is proposed to be added to read as follows:

§ 101.523 Geographic service areas and number of licenses.

The service areas for 24 GHz are Economic Areas (EAs). EAs are 175 areas, including U.S. territories and possessions, defined by the Department of Commerce's Bureau of Economic Analysis, as modified by the FCC.

32. Section 101.525 is proposed to be added to read as follows:

§ 101.525 24 GHz system operations.

(a) A licensee using the 24 GHz band may construct and operate any number of fixed stations anywhere within the area authorized to serve without prior authorization, except as follows:

(1) A station would be required to be individually licensed if:

(A) international agreements require coordination;

(B) submission of an Environmental Assessment is required under § 1.1307.

(C) the station would affect the radio quiet zones under § 101.123.

(2) Any antenna structure that requires notification to the Federal Aviation Administration (FAA) must be registered with the Commission prior to construction under § 17.4.

(b) Whenever a licensee constructs or makes system changes as described in paragraph (a), the licensee is required to notify the Commission within 30 days of the change under § 101.61 and include a statement of the technical parameters of the changed station.

33. Section 101.527 is proposed, as an alternative, safe harbor standard, to be added to read as follows:

§ 101.527 Construction requirements for 24 GHz operations.

(a) 24 GHz licensees must serve with a signal level sufficient to provide adequate service to at least one-third of the population in their licensed area within five years of being licensed and two-thirds of the population in their licensed area within 10 years of being licensed. Licensees may choose to define population using the 1990 census or the 2000 census. Failure by any licensee to meet these requirements will result in forfeiture or non-renewal of the initial license and the licensee will be ineligible to regain it.

(b) Licensees must file maps and other supporting documents showing compliance with the respective construction requirements within the appropriate five- and ten-year benchmarks of the date of their initial licenses.

34. Section 101.529 is proposed to be added to read as follows:

§ 101.529 Renewal expectancy criteria for 24 GHz licenses.

(a) A renewal applicant involved in a renewal proceeding shall receive a preference, commonly referred to as a renewal expectancy, that is the most important factor to be considered in the proceeding as long as the applicant's past record for the relevant license period demonstrates that:

(1) The renewal applicant has provided "substantial" service, i.e. service which is sound, favorable, and substantially above a level of mediocre service which just might minimally warrant renewal, during its past license term; and

(2) The renewal applicant has substantially complied with applicable FCC rules, policies, and the Communications Act of 1934, as amended.

(b) In order to establish its right to a renewal expectancy, a licensee in the 24 GHz service involved in a renewal proceeding must submit a showing explaining why it should receive a renewal expectancy. At a minimum, this showing must include:

(1) A description of its current service in terms of geographic coverage and population served; and

(2) Copies of all FCC orders finding the licensee to have violated the Communications Act or any FCC rule or policy; and a list of any pending proceedings that relate to any matter described in this paragraph.

(c) In making its showing of entitlement to a renewal expectancy, a renewal applicant may claim credit for any system modification applications that were pending on the date it filed its renewal application. Such credit will not be allowed if the modification application is dismissed or denied.

35. Section 101.531 is proposed to be added to read as follows:

§ 101.531 Application form and contents.

(a) Applications for initial authorization of 24 GHz facilities are filed on FCC Form 175 in accordance with Subpart M of this Part, and Subpart Q of Part 1. FCC Form 601 is submitted subsequently either by the winning bidder, if an auction is held to decide among two or more mutually exclusive applications, or, in cases of no mutual exclusivity, by the sole applicant. Applications to amend pending applications and to modify licenses are filed on FCC Form 600.

(b) *Foreign ownership information.* All applicants for 24 GHz licenses must provide the information requested on FCC Form 600 to address all of the eligibility requirements in § 101.7 of this Part. All licensees will keep the information updated.

36. Section 101.533 is proposed to be added to read as follows:

§ 101.533 Regulatory status.

(a) *Initial applications.*

An applicant for a 24 GHz license must specify on FCC Form 601 if it is requesting authorization to provide services on a common carrier basis, a non-common carrier basis, or on both a common carrier

and non-common carrier basis.

(b) Amendment of pending applications.

(1) Any pending application may be amended to: (i) change the carrier status requested, or (ii) add to the pending request in order to obtain both common carrier and non-common carrier status in a single license.

(2) Amendments to change, or add to, the carrier status in a pending application are minor amendments filed under § 101.29 in this Part.

(c) Modification of license.

(1) A licensee may modify a license to: (i) change the carrier status authorized, or (ii) add to the status authorized in order to obtain both common carrier and non-common carrier status in a single license.

(2) Applications to change, or add to, the carrier status in a license are modifications not requiring prior Commission authorization filed under § 101.61 of this Part. If the change results in the discontinuance, reduction, or impairment of an existing service, the licensee is also governed by § 101.305(b) or (c) and submits the application under § 101.61 in conformance with the time frames and requirements of § 101.305(b) or (c).

37. Section 101.535 is proposed to be added to read as follows:

§ 101.535 Geographic partitioning and spectrum disaggregation.

(a) Eligibility.

(1) Parties seeking approval for partitioning and disaggregation shall request from the Commission an authorization for partial assignment of a license.

(2) 24 GHz licensees may apply to partition their licensed geographic service area or disaggregate their licensed spectrum at any time following the grant of their licenses.

(b) Standards.

(1) Partitioning. In the case of partitioning, requests for authorization for partial assignment of a 24 GHz license must include, as attachments, a description of the partitioned service area and a calculation of the population of the partitioned service area and the licensed geographic service area. The partitioned service area shall be defined by coordinate points at every 3 degrees along the partitioned service area unless an FCC recognized service area is utilized (*i.e.*, Major Trading Area, Basic Trading Area, Metropolitan Service Area, Rural Service Area, Economic Area, or Major Economic Area) or county lines are followed. The geographic coordinates must be specified in degrees, minutes, and seconds to the nearest second of latitude and longitude and must be based upon the 1927 North American Datum (NAD27). Applicants may supply geographical coordinates based on 1983 North American Datum (NAD83) in addition to those required (NAD27). In the case where an FCC recognized service

area or county lines are utilized, applicants need only list the specific area(s) (through use of FCC designations or county names) that constitute the partitioned area.

(2) Disaggregation. Spectrum may be disaggregated in any amount.

(3) Combined Partitioning and Disaggregation. The Commission will consider requests for partial assignment of licenses that propose combinations of partitioning and disaggregation.

(c) Unjust Enrichment. 24 GHz licensees that received a bidding credit and partition their licenses or disaggregate their spectrum to entities not meeting the eligibility standards for such a bidding credit, will be subject to the provisions concerning unjust enrichment as set forth in section 1.2111.

(d) License Term. The license term for a partitioned license area and for disaggregated spectrum shall be the remainder of the original licensee's license term as provided for in section 101.67.

38. Section 101.537 is proposed to be added to read as follows:

§ 101.537 Competitive bidding: definitions.

For the purpose of establishing eligibility requirements and bidding credits for competitive bidding for licenses at 24 GHz, pursuant to section 1.2110, the following definitions apply:

(a) A small business is an entity that, together with its affiliates and controlling principals, has average annual gross revenues that are not more than \$40 million for the preceding three years, as determined pursuant to section 1.2110.

(b) A very small business is an entity that, together with its affiliates and controlling principals, has average gross revenues that are not more than \$15 million for the three preceding years, as determined pursuant to section 1.2110.